

Powered by GE Motors

1999

Pneumatic & Electronic II, Electronic III

OWNER'S WARUAL

Table of Contents

<u>Information</u>		Page Number	
Safety Instructions	•	3	
Basic Spa Information		4	
110 Volt Information	<i>t</i>	5	
220 Volt Information	And the second s	6-7	
Set-Up and Delivery Guidelines		8	
General Operating Instructions		9	
Filter Maintenance		10	
Filter Cleaning (External Equipment)) A	11	
Pneumatic Operation	A	12	
Electronic II Operation		· 13-1	5
Electronic III Operation	*	16-1	8
Winterizing and Draining Your Cal S	Spa	19	
Customer Assistance Program		20	

This owner's manual is filled with valuable information that will help you in all steps of spa ownership. It will answer many questions you may have from general operation to weekly maintenance. We suggest you keep this manual accessible for quick reference as you walk through the various functions of your new CAL SPA.

If you have any questions after reviewing this manual, please contact your local Showroom/Dealership or call 1-800-CAL-SPAS. We have fully trained professionals who can walk you through any question or problem you may have.

Please take a minute to fill out the following information, it can save time when trying to identify your spa for service or answering troubleshooting questions.

SHOWROOM/DEALERSHIP	
ADDRESS	
TELEPHONE NUMBER	
SALESPERSON	
DATE PURCHASED	
DATE DELIVERED	
SPA MODEL	
SPA SERIAL NUMBER	
EQUIPMENT NUMBER	

IMPORTANT SAFETY INSTRUCTIONS

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

- 1. Read and follow all instructions
- Warning-To reduce the risk of injury, do not permit children to use this product unless they are supervised at all times.
- All 110 volt spas require a DEDICATED 20 AMP SERVICE. Do not use extension cords. Note: This may require a licensed electrician to upgrade your standard receptacle and /or circuit breaker.
- 4. All 220 volt spas require a DEDICATED 50 AMP GFCI SERVICE WITH FOUR # 6 AWG COPPER WIRES.
- 5. **Danger**-Risk of Accidental Drowning. Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use the spa unless they are closely supervised at all times (Keep spa cover on when not in use).
- 6. **Danger-**Risk of injury. The suction fittings in this spa are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings or the pump, be sure that the flow rates are compatible. Never operate spa if the suction fittings are broken or missing. Never replace suction fitting with one rated less than the flow rate marked on the original suction fitting.
- 7. **Danger-**Risk of Electric Shock. Install at least 5 feet (1.5m) from all metal surfaces. As an alternative, a spa may be installed within 5 feet of metal surfaces if each metal surface is permanently bonded by a minimum **No. 8 AWG** solid copper conductor to the outside of the spas control box.
- 8. **Danger-**Risk of Electric Shock. Do not permit any electrical appliance, such as a

- light, telephone, radio, and televisions, within 5 feet (1.5m) of spa.
- 9. Warning-To reduce the risk of injury:
 - a.) The spa water should never exceed 104°F (40°C). Water temperatures between 100° (38°C) and 104°F (40°C) are considered safe for a healthy adult. Lower water temperatures are recommend for young children, and when spa use exceeds 10 minutes.
 - b.) Since excessive water temperatures have a high potential for causing fetal damage during early months of pregnancy, pregnant or possibly pregnant women should always check with a physician prior to spa usage.
 - c.) Before entering a spa, the user should measure the water temperature with an accurate thermometer, since the tolerance of water temperature-regulating devices varies.
 - d.) The use of alcohol, drugs, or medication before or during spa use may lead to unconsciousness with the possibility of drowning.
 - e.) Persons suffering from obesity or with a medical history of heart disease, low or high blood pressure, circulatory system problems or diabetes should consult a physician prior to spa usage.
 - f.) Persons using medication should consult a physician before using a spa since some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.

Save These Instructions

Basic Spa Information

Introduction:

Congratulations on the purchase of your new Cal Spa. Our purpose is to provide you with the most relaxing hot water massage you have ever encountered. In order to maximize the pleasure of your new spa, you will need to understand how it works.

Your new Cal Spa has been engineered with a high-powered water pump that pushes water through various therapy jets, which will relax even the tightest of muscles. In addition to the water pressure, you can add air into the spa water with air venturies or the optional turbo feature, to increase the intensity of your massage.

Do not be afraid to push buttons or turn knobs to learn about your new Cal Spa, as it is built with quality materials and excellent craftsmanship.

The following operating and maintenance instructions are very important, and must be followed carefully. With the proper care and maintenance, your Cal Spa will provide you with years of satisfaction and performance with minimum effort.

The filtering of your spa is very important, this alone will cut down cleaning time and use of excess chemicals. We recommend that your spa filters no less than four hours twice a day. Electronically controlled spa will automatically do this when you turn them on for the first time.

It is very important to keep the spa covered when not in use for two reasons. The first is heating efficiency, covered spas use less electricity in maintaining your set temperature. The second is to protect your spas finish from the suns ultra violet rays. Covering your spa is mandatory to maintain warranty coverage.

Your spas' optional turbo feature should be used sparingly. When operating the turbo, water temperature drops quite rapidly and also dissipates chemicals.

The filter needs to be cleaned on a regular basis. This is very simple and only takes a few minutes. The result is increased water clarity and equipment longevity.

Cleaning your filter just requires you taking the filter out, spraying it down and reinstalling it. (See pages 10 and 11 for filter cleaning instructions.)

The spas water level is very important to the operation of your spa. If the water level is too low or too high, your spa won't run or clean properly. (The water level should be to the middle of the Weir Skimmer area when no one is in the water.)

We recommend that your spa water be changed every 4 to 6 months. You may find the need to change your spa water more often with heavy use.

When empty, your spa should be cleaned with a non-abrasive cleaner, like "Cal Spas All Surface Cleaner," then rinsed thoroughly.

When filling your spa, always fill through the top-load filter. Only use regular tap water. **DO NOT USE SOFT WATER.**

When draining your spa, turn off the power to the spa and attach a garden hose to the hose bib fixture located on the floor of the equipment area.

NOTE: Spas built in the winter months may be delivered with the bleeder valves removed from the pumps and taped inside the control box. We remove the bleeder valves after water testing at the factory, to prevent possible freeze damage during shipping. Prior to filling your spa for the first time, make sure you replace the air bleeder valves and check the equipment area for any unions that might have loosened during shipment.

In addition to your portable spas' redwood skirt, you may have purchased a gazebo, cabana, steps or any other redwood accessory. We recommend that you protect them by applying a high quality redwood protectant, and repeat as specified on the directions. This is mandatory to maintain warranty coverage.

110 Volt Information

Always Follow Applicable Local, State, and Federal Codes and Guidelines.

Use only a dedicated electrical line with a 20-amp breaker.

Do not use an extension cord.

Always use a weatherproof/covered receptacle.

Never have your spa closer than 10 feet to the receptacle.

In the event of a damaged cord, you must replace it before next usage.

Do not bury the power cord.

All 110-volt spas include a GFCI plug. This GFCI plug should be tested prior to every use. To test the GFCI, please follow these easy instructions:

Note: Spa is already plugged in and operational.

- 1. Press the button marked "Test" on the GFCI. The GFCI will trip and the spa will stop operating.
- 2. Press the button marked "Reset" on the GFCI. The GFCI will reset and the spa will turn back on in about 5 seconds.
- 3. The spa is now safe to use.

If the GFCI should turn off (trip) while the spa is in use, press the reset button. If the GFCI will not reset, unplug the GFCI and call your local Showroom/Dealership for service. **DO NOT USE SPA.**



220 Volt Information

All 220-volt spas are required to have a GFCI breaker and should only be wired by a licensed electrician. To ensure proper wiring of your GFCI, please follow the wire diagrams on pages 6 and 7.

Always Follow Applicable Local, State, and Federal Codes and Guidelines.

Your new 220 volt CAL SPA requires a **DEDICATED 50 AMP GFCI SERVICE WITH FOUR** # 6 **AWG COPPER WIRES**. This will include a black and red wire for your incoming power, a white wire used for your neutral and a green wire for your ground.

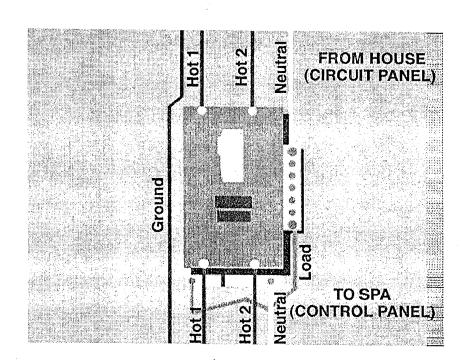
Please note that this is the only acceptable electrical wiring procedure. Spas wired other than what's stated in this manual will void your warranty.

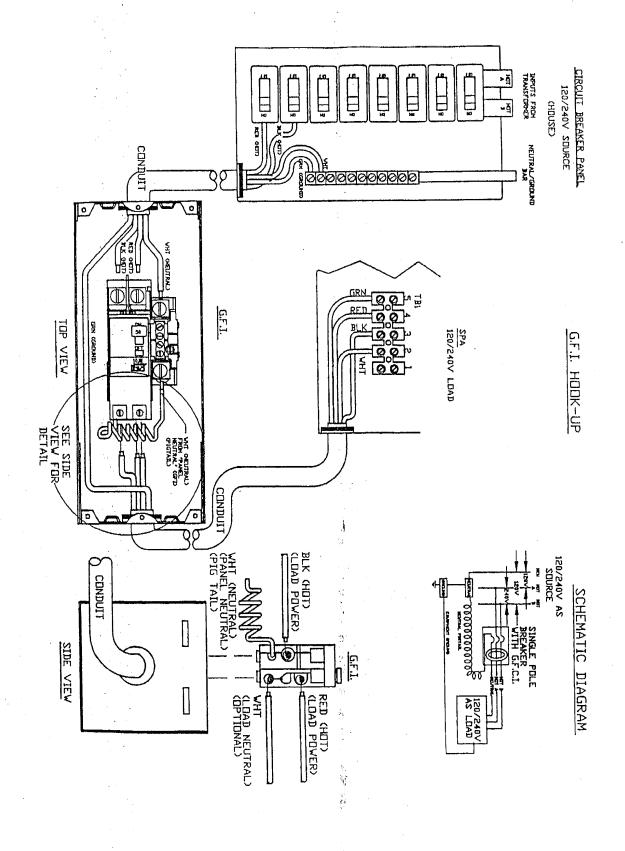
Before each use of your spa check the GFCI. During this test the spa should be operating.

- 1. Press the test button on the GFCI. The GFCI will trip and the spa will shut off.
- 2. Wait 30 seconds and reset the GFCI breaker, this is done by turning the breaker off and then back on. Your spa will be operational in about 5 seconds.
- 3. Your spa is now safe to use.



G.F.C. HOOK-UP





Set-Up and Delivery Guidelines

Getting Ready for Delivery and Set-up of Your New Cal Spa

Planning For Delivery of Your Portable Spa:

Your 110-Volt spa will require a 20 amp dedicated receptacle.

Your 220-volt spa will require a 50 amp dedicated GFCI circuit breaker.

If you have any doubts, have your electrical system checked by a qualified, licensed electrician.

Surface and Pad Requirements for Spas and Gazebos

Your new portable spa and or gazebo must be placed on a uniformly firm, flat and level concrete pad. We recommend a 3½" thick slab. Gazebos assembled on surfaces either not flat or level will result in windows and doors closing improperly.

If the location of your spa is going to be near a sprinkler system, make sure you adjust the sprinkler heads away from the spa. Water continually sprayed on spa cabinet or in equipment area may cause wood or electrical component damage.

Requirements for Decking, Gates and Balconies:

All decking must be able to support 150 pounds per square foot.

Surrounding area gates must be self-closing and self-latching (California Requirements).

Balconies must be constructed to current state and local code. (Spa load requirements are 150 pounds per square foot)

Planning for Delivery of Your In-ground Spa:

Selecting the right site for the installation of your in-ground spa and equipment is very important. These sites should be city and state approved, also considering the ease of access, landscaping, and architectural styling.

The following is a list of information the delivery crew will need prior to delivery:

- Clearance through gates, around gas meters, fireplace, air conditioners or other obstacles.
- Measure the height between ground and lowest point of roof eaves. Distance between spa and equipment. (Including all turns and obstacles)
- Finished height of spa lip. (From ground to bottom of lip)

IMPORTANT

ALWAYS HAVE A LICENSED CONTRACTOR /ELECTRICIAN INSTALL ALL EQUIPMENT. ALWAYS WATER TEST YOUR NEW IN-GROUND SPA FOR <u>FIVE DAYS</u> BEFORE COMPLETING ANY DECKING OR FINISH WORK.

DO NOT PLACE EQUIPMENT MORE THAN 20 FEET FROM SPA.

DO NOT INSTALL EQUIPMENT HIGHER THAN SIX INCHES ABOVE WATER LEVEL, OR LOWER THAN THE BOTTOM OF THE SPA.

LEAVE ALL TRENCHES OPEN FOR FINAL INSPECTION BY YOUR LOCAL INSPECTOR.

WARNING Do Not Exceed 104°F

Excessive Temperature May Void Warranty

General Operating Instructions

Your new Cal Spa is very versatile; you can direct the flow of water and air through various locations in your spa. The following list of features are available on most spas:

Air Venturies: Air Venturies are the smaller knobs located around the top of your spa. Each one will

let you add a mixture of air in with the jet pressure. Multiple air venturies allow you to

add or turn off the air in different seats.

Note: The Air Venturi system may not be controlled on spas with the optional Turbo System.

Adjustable Jets: Almost all Jets are adjustable. These Jets just require a turn from left to right to either

turn that Jet on or off.

Diverter Knobs: Diverter knobs are the larger knobs located around the top of your spa. They allow you

to divert water through jets from one side of the spa to the other.

Priming the Pump(s) on Portable Spa

An important step in starting-up your new Cal Spa is priming the pump. Priming the pump is the process of removing the air from the plumbing lines. To do this, just follow the easy steps below.

- 1. Turn power off at the breaker.
- 2. Open all the gate valves (if equipped: up = open).
- 3. Fill the spa to the proper water level with REGULAR TAP WATER. (½ way up the skimmer area)
- 4. Open the air relief valve, located in the skimmer area of most system spas. On all other spas, must use the air relief valve located on the front of the pump.
- 5. After the air bubbles stop coming out of the air relief valve, tighten valve until closed (Do not over tighten).
- 6. Turn power on at breaker.
- 7. After a five-second countdown, press the jets button.
- 8. Allow pump to run for up to five minutes. If water does not start to circulate within five minutes repeat steps 1 through 7.

Priming the Pump(s) on Gas Packs

- 1. Turn power off at the breaker.
- 2. Open all the gate valves (if equipped: up = open).
- 3. Fill spa up to the proper water level with **REGULAR TAP WATER**. (½ way up the skimmer area)
- 4. Remove lid(s) from pump basket(s) and filter canister.
- 5. Fill pump basket(s) and filter canister with a garden hose until full and replace lids snug.
- 6. Turn power on at breaker.
- 7. Press the Jets button.
- 8. Allow pump to run for up to five minutes. If water does not start to circulate within five minutes repeat steps 1 through 7.

Important Notes:

Be careful not to over tighten filter or pump basket lids.

Never run spa with gate valves closed or run pumps without water circulating for long periods of time.

All electronically controlled spas will automatically run on low / filter speed until water temperature reaches its preset temperature.

Filter Maintenance

Portable and In-ground Spas

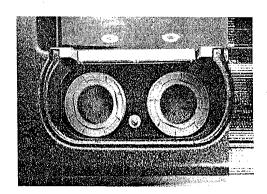
Filtration starts on electronically controlled spas as soon as the pumps are primed and water flow is steady. As the flow of water goes through the filter, dirt and debris is removed and accumulated in the filter cartridge. As the filter cartridge accumulates minerals, dirt and debris, water flow is lessened and jet performance is reduced. This can cause your spa not to run or heat properly.

Clean Your Filter Regularly, and Replace as Needed

Filter Cleaning: Portable Spas

Your new Cal Spa has been designed for quick and easy filter maintenance. The filter cartridge should be cleaned once a week.

- 1. Turn power off at the breaker.
- 2. Remove filter cover. (If equipped)
- 3. Remove filter basket. (Twist and Pull-up)
- 4. Remove filter, (Pull-Out) and clean with a garden hose.
 - a. Hold filter vertically.
 - b. Spray filter cartridges with a pressure nozzle, starting from the top and spraying down each pleat.
 - c. Turn filter cartridge over and repeat step (4b).
 - d. Reinstall filter cartridge in reverse order of removal.



Spa Cal Filtration System



Standard Filtration
System

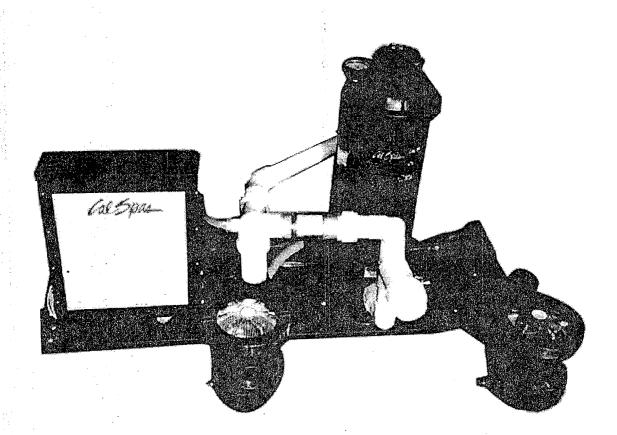


Hi –Volume Filter Canister

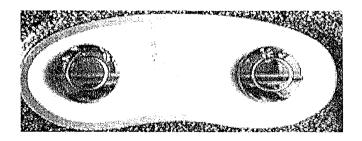
Filter Cleaning:

Gas Packs

- A. Turn off power at breaker.
- B. Close all gate valves (if equipped; down = closed).
- C. Remove lock nut from top of filter canister.
- D. Remove filter cartridge. (pull-up and Out)
- E. Hold filter vertically.
- F. Spray filter cartridge with a pressure nozzle, starting from the top and spraying down each pleat.
- G. Turn filter cartridge over and repeat step (E, F).
- H. Reinstall filter cartridge in reverse order of removal.



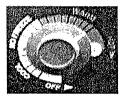
Pneumatic Operation One, Two, and Three Button Panels

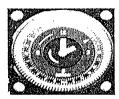


Start up

When first powered up, flip the selector switch to the Freeze Protection Mode and the spa will run and heat to whatever temperature the thermostat is positioned to.









Temperature Adjustment

Rotate the thermostat knob from OFF to HOT to find desired water temperature. Range of water temperature will be from OFF to 104°F in the HOT position.

Jet Controls

Depress the **Jet** button(s) to activate the high-speed pump(s). Depress the **Jet** button again to turn off the high-speed pump(s).

Light

Depress the Light button to turn on the spa light. Depress the Light button again to turn off the spa light.

Turbo (Optional)

Depress the **Turbo** button to turn on the spa Turbo System. Depress the **Turbo** button again to turn off the turbo system.

Time Clock / Freeze Protection

Freeze Protection: When in this mode, the thermostat will automatically maintain the water temperature that the thermostat is set to.

Time Clock: When in this mode, the temperature will only be maintained during the time that you have set on the time clock.

Filter Cycles

Filtration of the spa water is accomplished any time the pump is running. To set personal filtration time, simply press the white tabs towards the center of the time clock. Each white tab equals (15) fifteen minutes of filtration and heating (if necessary).

Hi Limit

Your spa is equipped with a high limit safety switch that will automatically shut down the spa in the unlikely event of an overheat situation. To reset the Hi Limit, simply push the Hi-limit button in until it stops, and the spa will restart itself.

Safety Suction System

Your spa is equipped with a Safety Suction System that will automatically shut down the spa in the event of a blockage of a suction fitting or filter obstruction. To reset the Safety Suction System, simply push the button located on the right side of the control box, and the spa will restart itself.

Electronic II Operation

Start up

When first powered up, the system will perform a self-diagnostic check, then will automatically heat and maintain 100°F.



Temperature Adjustment

Depress the **Temp** pad to display the set temperature. The current set temperature will be flashing on the display panel. In a few seconds the display will stop flashing and will display the actual water temperature. When display is flashing, depress the **Temp** pad a second time, this will cause the set temperature to increase or decrease depending on what direction was last chosen. Each additional press will change the set temperature in the same direction.

If the opposite direction is desired, release the pad and let the display revert to the actual water temperature. Depress the **Temp** pad to display the set temperature, and again to make the temperature change in the desired direction.

Standard and Economy Modes

Your new spa is equipped with a **Standard** and **Economy**-heating feature, that gives you complete control of the heating system.

When the spa is powered up, it will automatically start in "Standard Heating Mode". In this mode, the heating system will automatically activate whenever the water temperature drops more than one degree than the set temperature. In the "Economy Heating Mode" the heating system will only activate during filtration times. (Filtration times are set by using the "Setting Filtration Cycles" section on page 14.)

To switch from the "Standard Heating Mode" to the "Economy Heating Mode", simply depress the Temppad followed by the Light pad. Depress the same sequence to switch back to the "Standard Heating Mode".

Once in the "Economy Heating Mode", "EC" will be displayed in the center of the topside control panel and flash alternately of the water temperature. This is to inform you of what heating mode you are currently in.

Note: There is not a topside control panel message displayed when in the "Standard Heating Mode". Only the actual water temperature will be displayed.

Jet Controls

One pump equipment:

Depress the Jets button pad once to activate low speed. Depress the pad again to activate the high-speed. Depress the pad a third time to turn off the high-speed.

One pump equipment with circulation pump:

Depress the Jets pad once to activate the circulation pump. Depress the pad again to activate the circulation pump and the high-speed pump. Depress the pad a third time to turn off both the circulation pump and the high-speed pump.

Electronic II Operation (cont.)

Two pump equipment without circulation pump:

Depress the Jets pad once to activate low speed pump. Depress the pad again to activate high-speed on pump 1. Depress the pad a third time to activate the high-speed on pump 1 and high-speed on pump 2. Depress the pad a fourth time and only the high-speed on pump 2 will be on. Depress the pad a final time to turn pump 2 high-speed off.

Two pump equipment with circulation pump:

Depress the Jets pad once to activate the circulation pump. Depress the pad again to activate the circulation pump and the high-speed pump 1. Depress the pad a third time and the circulating pump, high-speed pump 1 and high-speed pump 2 will be on. Depress the Jets pad a fourth time, and only the high-speed pump 2 will be activated. Depress the pad a final time to turn off pump 2 high-speed.

Light

Depress the Light pad to turn on the light and again to turn the light off.

Mister (Optional)

Depress the Light pad to turn on the light. Depress the Light pad again to turn on the light and the mister system. Depress the Light pad a third time to turn both the light and the mister system off.

Turbo (Optional)

Depress the Turbo pad once to activate the turbo system, and again to turn it off.

Setting the Temperature lock

This feature allows you to lock-in a temperature into the system. When engaged the set temperature will blink on and off when the **Temp** pad is depress. However, the user will not be able to change the set temperature. Using the steps listed below you can lock or unlock the set temperature.

Depress the Temp pad, and then depress either the Turbo or the Key pad to lock the set temperature in. Depress the same sequence to unlock.

Automatic Time outs

The low-speed or (optional) circulation pump will automatically turn itself off after 4hours if not turned off manually.

Either high-speed pump will automatically turn itself off after 30 minutes if not turned off manually. The optional turbo will automatically turn itself off after 15 minutes if not turned off manually. The light will automatically turn itself off after 4 hours if not turned off manually.

Setting Filtration Cycles

Your spa will automatically filter itself twice a day. To set filtration time, turn off the power to the spa at the time of day you would like to start filtration. The first cycle will start after the spa is powered up. The second filter cycle will begin twelve hours later. Filter cycle duration is preset for 4 hours (F4). To change duration of filtration time, depress the Temp pad, then press the Jets pad. Depress the Temp button again to choose from 2,4,6,8, and 12 hours twice a day (FC=12 hours continuous filtration). After selecting the desired filtering duration, depress the Jets pad to exit the filter program. The circulating pump and ozone generator (optional) will run during filter cycles.

Note: The filter cycles settings of F8 and FC are only intended for use with the optional "Spa Cal Filtration System".

Safety Suction System

Your new Cal Spa is equipped with a state of the art "Safety Suction System." This will automatically shut the spa down in the event of filtration or suction restriction and display "SF" on the topside control panel. If this happens, check all suction fittings and filter cartridge(s) for obstructions. Then reset the system by depressing any topside pad.

Self-Diagnostics

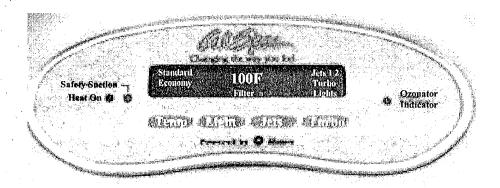
Display Messages for Electronic II Spas

Message	Meaning	Action Required
EC (Flashing)	"Economy Heating Mode" When flashes alternately of the water temperature, your spa is in the Economy Heating Mode.	This message does not indicate the need for service. For more information see the Standard and Economy Mode Section on page 13.
OH	"Overheat" The spa has shut down. Either the spa has reached 112°F or the Highlimit sensor has detected 118°F in the heater manifold.	DO NOT ENTER THE SPA WATER. Remove the spa cover and let the water cool. At 110°F, the spa should automatically reset. If the spa does not automatically reset, press any pad on the topside panel. If the spa still won't reset, turn off the power and call your local service center.
FL	"Flow" A pressure switch has detected a loss of water flow.	Check the filter for debris. If dirty clean. (See page 10 for cleaning instructions.) If problem persist, call your local service center.
SF	"Safety" Spa is shut down. The safety suction system has activated.	Check the drains and filter for debris or obstructions. To reset the system press any pad on the topside.
SN	"Sensor" Spa is shut down. High-limit / Temperature sensor has malfunctioned.	Call your local service center.
Heat On, Safety Suction, And Ozonator LED's	"LED's" These LED lights are used to inform you of feature operation.	These are not service indicators.

Electronic III Operation

Start up .

When first powered up, the system will perform a self-diagnostic check, then will automatically heat and maintain 100°F.



Temperature Adjustment

Depress the **Temp** pad to display the set temperature. The current set temperature will be flashing on the display panel. In a few seconds the display will stop flashing and will display the actual water temperature. When display is flashing, depress the **Temp** pad a second time, this will cause the set temperature to increase or decrease depending on what direction was last chosen. Each additional press will change the set temperature in the same direction.

If the opposite direction is desired, release the pad and let the display revert to the actual water temperature. Depress the **Temp** pad to display the set temperature, and again to make the temperature change in the desired direction.

Standard and Economy Modes

Your new spa is equipped with a **Standard** and **Economy**-heating feature, that gives you complete control of the heating system.

When the spa is powered up, it will automatically start in "Standard Heating Mode". In this mode, the heating system will automatically activate whenever the water temperature drops more than one degree than the set temperature. In the "Economy Heating Mode" the heating system will only activate during filtration times. (Filtration times are set by using the "Setting Filtration Cycles" on page 17.)

To switch from the "Standard Heating Mode" to the "Economy Heating Mode", simply depress the Temp pad followed by the Light pad. Depress the same sequence to switch back to the "Standard Heating Mode".

Once in the "Standard Heating Mode", "Standard" will be displayed on the left side of the control panel.

Once in the "Economy Heating Mode", "Economy" will be displayed on the left side of the control panel.

Jet Controls

Depress the Jets pad once to activate the circulation pump. Depress the pad again to activate the circulation pump and the high-speed pump 1. Depress the pad a third time and the circulating pump, high-speed pump 1 and high-speed pump 2 will be on. Depress the Jets pad a fourth time, and only the high-speed pump 2 will be activated. Depress the pad a final time to turn off pump 2 high-speed.

Jets Display:

When the circulation pump is operating, the topside control panel will display **Jets** in the upper right side. When the circulation and pump one (1) are operating, the topside control panel will display **Jets** 1 in the upper right side.

When the circulation pump and both pump one (1) and two (2) are operating the topside control panel will display Jets 1 2 in the upper right side.

When the circulation and pump two (2) are operating, the topside control panel will display Jets 2 in the upper right side.

Electronic III Operation (cont.)

Light

Depress the Light pad to turn on the light and again to turn the light off.

Mister (Optional)

Depress the Light pad to turn on the light. Depress the Light pad again to turn on the light and the mister system. Depress the Light pad a third time to turn both the light and the mister system off.

Turbo (Optional)

Depress the Turbo pad once to activate the turbo system, and again to turn it off.

Setting the Temperature lock

This feature allows you to lock-in a temperature into the system. When engaged the set temperature will blink on and off when the Temp pad is depress. However, the user will not be able to change the set temperature. Using the steps listed below you can lock or unlock the set temperature.

Depress the Temp pad, and then depress either the Turbo or the Key pad to lock the set temperature in. Depress the same sequence to unlock.

Automatic Time outs

The circulation pump will automatically turn itself off after 4hours if not turned off manually. Either high-speed pump will automatically turn itself off after 30 minutes if not turned off manually. The optional turbo will automatically turn itself off after 15 minutes if not turned off manually. The light will automatically turn itself off after 4 hours if not turned off manually.

Setting Filtration Cycles

Your spa will automatically filter itself twice a day. To set filtration time, turn off the power to the spa at the time of day you would like to start filtration. The first cycle will start after the spa is powered up. The second filter cycle will begin twelve hours later. Filter cycle duration is preset for 4 hours (F4). To change duration of filtration time, depress the Temp pad, then press the Jets pad. Depress the Temp button again to choose from 2,4,6,8, and 12 hours twice a day (FC=12 hours continuous filtration). After selecting the desired filtering duration, depress the Jets pad to exit the filter program. The circulating pump and ozone generator (optional) will run during filter cycles.

Safety Suction System

Your new Cal Spa is equipped with a state of the art "Safety Suction System." This will automatically shut the spa down in the event of filtration or suction restriction and display "SF" on the topside control panel. If this happens, check all suction fittings and filter cartridge(s) for obstructions. Then reset the system by depressing any topside pad.



Self-Diagnostics

Display Messages for Electronic III Spas

Message	Meaning	Action Required
ОН	"Overheat" The spa has shut down. Either the spa has reached 112°F or the Highlimit sensor has detected 118°F in the heater manifold.	DO NOT ENTER THE SPA WATER. Remove the spa cover and let the water cool. At 110°F, the spa should automatically reset. If the spa does not automatically reset, press any pad on the topside panel. If the spa still won't reset, turn off the power and call your local service center.
FL	"Flow" A pressure switch has detected a loss of water flow.	Check the filter for debris. If dirty clean. (See page 10 for cleaning instructions.) If problem persist, call your local service center.
SF	"Safety" Spa is shut down. The safety suction system has activated.	Check the drains and filter for debris or obstructions. To reset the system press any pad on the topside.
SN	"Sensor" Spa is shut down. High-limit / Temperature sensor has malfunctioned.	Call your local service center.
Heat On, Safety Suction, And Ozonator LED's	"LED's" These LED lights are used to inform you of feature operation.	These are not service indicators.

Winterizing and Draining Your Cal Spa

Winterizing

In many areas of the country the temperature drops below 32° F. If you live in these areas, we recommend you always have your spa full of water and running at normal spa temperatures (80° F to 100°F). This will help reduce the risk of freezing in your spa and your spa's equipment.

IMPORTANT WARNING

If you find the need to drain your spa, please be aware of the potential of freezing in your spa's equipment and plumbing. Even if the directions below are followed perfectly, there is no guarantee that your spa will not suffer freeze damage.

Cold Climate Draining

- 1. Open all filters and filter baskets.
- 2. Remove filter(s)
- 3. Drain your spa completely.
- 4. Remove drain plugs from the front of pump(s).
- 5. Disconnect the unions from both sides of the pump.
- 6. Use a wet/dry vacuum to blow any remaining water out of the jets and plumbing lines.
- 7. Use a soft towel to remove any remaining water in the spa, filter canister, and equipment area.
- 8. Cover your spa with a good spa cover and all-weather tarp, to ensure rain or snow can not enter the spa.
- 9. If your have a **Gas Heater**, you will need to follow the winterizing instructions for your particular heater in the owner's manual. This manual will be delivered inside your gas heater.

Draining Your Spa

Your spa should be drained every 4 to 6 months, and refilled with fresh tap water. Here are two recommended methods of draining your spa.

Method one (Portable Spas)

- 1. Turn off power.
- 2. Open all filters and filter baskets.
- 3. Remove filter(s).
- 4. Hook up the female end of a garden hose to the spas drain fitting and the other end in a convenient place for draining. *(Locate white hose in the bottom of the equipment area, remove cap and connect garden hose.)
- 5. Let spa drain completely, then remove garden hose and replace the drain cap.

Method Two (In-ground and Portable Spas)

- 1. Turn the spa on.
- 2. Hold the female end of a garden hose in front of any working jet, and the other end in a convenient place for draining. *
- 3. Hold the garden hose in front of a working jet until you have constant water flow through the hose.
- 4. After you have a constant flow of water through the garden hose, secure the hose so the female end sets in the bottom of the spa and turn off the power. This process will create a siphon and the water will drain out of the garden hose.

^{*} NOTE: Prevent drain water from coming in contact with fragile shrubs and foliage.

Customer Assistance Program

Your satisfaction and goodwill is important to your Dealer and Cal Spas. Normally, any problems with the sales transaction or the operation of your spa will be resolved by your Dealers Sales or Service Departments. Sometimes, however, despite the best intentions of all concerned, misunderstandings can occur. If your concern has not been resolved to your satisfaction, the following steps should be taken:

Step One:

Discuss your problem with the Store Manager. Complaints can often be quickly resolved at this level.

Step Two:

If after contacting a Store Manager, it appears your problem cannot be resolved by the dealer without further help, Contact the Cal Spas Customer Relations Department by calling 1-800-CAL-SPAS. For prompt assistance, please have the following information available to give to the Customer Relations Representative:

- Your name, address, telephone number
- Spa Identification Number (This is available from the plate attached to the front of the spa.)
- Dealer name and location
- Spa's delivery date
- Nature of problem

If you wish to write Cal Spas, forward your correspondence to:

Cal Spas
Customer Relations Department
1462 East Ninth Street
Pomona, CA 91766

When contacting Cal Spas, please remember that your problem will likely be resolved by contacting your dealer. This is why we suggest you follow Step One first if you have a problem. Cal Spas' ultimate goal is Customer Satisfaction, therefore, you can be assured your satisfaction is guaranteed.

Cal Spas recommends using Cal Spa genuine replacement parts for best performance and operation.